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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Masato Ochiai

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EXAMINER

ENGLAND, DAVID E

ART UNIT

PAPER NUMBER

2143

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/507,941	Applicant(s) OCHIAI, MASATO	
	Examiner DAVID E. ENGLAND	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21 and 47 – 49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21 and 47 – 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21 and 47 – 49 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21 and 47 – 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Applicant has amended the independent claim language to state that the setting unit sets a logic address of the network apparatus. There is no teaching, in any part of the specification, that teaches the setting unit setting a logic address of a network apparatus. What is stated on page 23 of the specification is, "When the data length 704 is equal to 507 bytes in step S1003, the destination IP address 711 of the IP Header 502 is set as an own IP address in step S1004. After the IP address was set, the pseudo ICMP management module 405 hands the packet to the ICMP management module 404. In this instance, the unnecessary Ethernet Header and IP Header are

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removed.” As can be clearly seen there is no discussion or teachings that show the actual device's address being set. Applicant is asked to amend the claims to state that it is the IP Header of the packet that is set.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 2, 4, 12, 13, 15 and 47 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 in view of Fujimori et al. (6438607) (hereinafter Fujimori) and what is well known in the art.**

7. For Examination purposes and in light of the specification of what is truly being claimed in the Independent claims, the Examiner will treat the limitations of "setting the apparatus address” as the “header of the received packet as the logic address”.

8. Therefore, referencing claim 1, as closely interpreted by the Examiner, RFC 2390 teaches a network apparatus comprising:

9. a receiving unit for receiving data from a network, (e.g., pages 1 – 8);

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10. a setting unit for setting a logic address of said network apparatus based on a destination logic address of the received data so that the logic address of said network apparatus and the destination logic address of the received data are the same in a case where the detected value indicative of a destination physical address of the received data and a physical address of said network apparatus are the same, (e.g., pages 1 – 8, It is interpreted that the true meaning of the invention is setting the logic address of the packet if it matches the network apparatus.);

11. detect a value indicative of a data length, the value being in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol, (e.g., pages 1 – 8).

12. What RFC 2390 does not specifically teach is the data length is a specific value indicative of a specific data length different from actual data length of the received data; and

13. a detecting unit for detecting a value indicative of a data length in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol.

14. Fujimori teaches the data length is a specific value indicative of a specific data length different from actual data length of the received data, (e.g., col. 4, lines 48 – 61, “*As an additional option, error checking bit(s) may be included within the request packet. These bits may be for detecting and/or correcting errors within the packet through implementation of an error checking code, such as a cyclic redundancy code (CRC). Moreover, **multiple groups of error checking bits may be included within the packet**, with each group dedicated to detecting and/or correcting errors within a distinct portion of the packet. Thus, for example, the ARP header division may include a **first group of dedicated error checking bits** for use in detecting*”

and/or correcting errors in the header division's contents, while the ARP data division may include a second group of dedicated error checking bits for use in detecting and/or correcting errors in the data division's contents.'");

15. a detecting unit for detecting a value indicative of a data length in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol, (e.g., col. 4, lines 48 – 61).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Fujimori with RFC 2390 because it is well known that multiple protocols may be utilized in a transmission and furthermore checking errors in different sections of the packet can determine where specifically an error could occur, i.e., knowing that the error is in the packet as opposed to knowing that the error is in the header or the body of the packet.

17. Furthermore, it is well known in the art that transmitted messages are divided into predetermined lengths that are divided by a fixed divisor. According to the calculation, the remainder number is appended onto and sent with the message. When the message is received, the computer recalculates the remainder and compares it to the transmitted remainder. If the numbers do not match, an error is detected. Therefore, if an error is detected the packet is no longer valid and discarded. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to check if the data length is correct or the packets would be in error and the packet would be discarded.

18. Referencing claim 2, as closely interpreted by the Examiner, RFC 2390 and Fujimori teach all that is similar in nature above herein out. RFC 2390 and Fujimori further teaches in a

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case where the destination logic address of the received data and the logic address of said network apparatus differ, (e.g., pages 1 – 8, the destination address is null or zeros which is differ from the actual destination logic address of the network apparatus), the destination physical address of the received data and the physical address of said network apparatus are the same, and the detected value indicative of the data length is the specific value, said setting unit sets the destination logic address of the received data as logic address of said network, (e.g., RFC 2390 pages 1 – 8 & Fujimori col. 4, lines 48 – 61).

19. Referencing claim 4, as closely interpreted by the Examiner, RFC 2390 said physical address is a media access control address, and the logic address is an Internet protocol address, (e.g. pages 1 – 8).

20. Claims 12, 13, 15 and 47 – 49 are rejected for similar reasons as stated above.

21. Claims 6, 9, 10, 17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 and Fujimori in view of Anderson et al. (5850388) (hereinafter Anderson).

22. Referencing claim 6, as closely interpreted by the Examiner, RFC 2390 and Fujimori teach all that is similar in nature above that can be applied herein out. RFC 2390 teaches the use of Inverse ARP, which is part of TCP/IP protocol and could be considered a type of echo request that is utilized to find IP addresses from different devices.

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23. Anderson teaches the received data is an ICMP echo message by an ICMP protocol and the value indicates a data length of the ICMP echo message, (e.g. col. 12, lines 22 – 56 & col. 20, line 54 – col. 21, line 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Anderson with the combine teachings of RFC 2390 and Fujimori because using an ICMP echo is not only well known in the computer arts to aid in finding devices on a network. Furthermore, utilizing a data length, sometimes known as a “checksum”, “CRC” or error checking bits, allows the end system to check for errors in the packet if the data length is not to the predetermined length.

24. Claims 9, 10, 17, 20 and 21 are rejected for similar reasons stated above.

25. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 and Fujimori in view of Kano et al. (6310858) (hereinafter Kano).

26. As per claim 8, as closely interpreted by the Examiner, RFC 2390 teaches a network apparatus comprising:

27. a receiving unit for receiving data from a network, (e.g. pages 1 – 8);

28. a detecting unit for detecting a value, the value being in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol, (e.g. pages 1 – 8); and

29. a setting unit for setting a logic address of said network apparatus based on a destination logic address of the received data so that the logic address of said network apparatus and the

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destination logic address of the received data are the same in a case where the detected value is a specific value, (e.g. pages 1 – 8);

30. and a destination physical address of the received data and a physical address of said network apparatus are the same, (e.g. pages 1 – 8), but does not specifically teach detecting TTL;

31. the TTL value being referred to by a router and reduced by the router when the router receives the data. Kano teaches detecting TTL being a specific value different from a value which is generally set under the predetermined protocol, (e.g., col. 4, lines 40 – 65);

32. the TTL value being referred to by a router and reduced by the router when the router receives the data, (e.g., col. 1, lines 17 – 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kano with the combine teachings of RFC 2390 and Fujimori because if the TTL value is not greater than a specific number than the packet will be terminated and returned to the sender indicating that the device is not within the allotted hop count given and the device would have to send out another packet with a higher TTL number in order to reach the destination device. Furthermore, reducing the TTL every time it traverses a node or a router is well known in the art for that specific functionality, i.e., once the TTL value reduces to 0 the packet is canceled. The point of using TTL is so the packet does not continually hop from node to node for an over extended period of time.

33. Claim 19 is rejected for similar reasons stated above.

Response to Arguments

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34. Applicant's arguments filed 01/11/2008 have been fully considered but they are not persuasive.

35. **In the Remarks**, Applicant argues in substance that the prior art does not teach the amended claim limitations of, “a setting unit for setting a logic address of said network apparatus based on a destination logic address of the received data.”

36. As to the first remark, In the interview, the Examiner expressly stated that this limitation was NOT in the specification and that Figure 10 teaches that the packet is set with the logic address of the destination device if a value in the header matches. In the Applicant's specification, page 23, it is clearly stated that the header is set. There are no teachings in the specification that state a network apparatus is set with a logic address.

37. All other arguments are similar to the one addressed above.

Conclusion

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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